

GP 1642

Docket No.: A7542.0000/P001-E
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Ginette Serrero

Application No.: Not Yet Assigned

Group Art Unit: 1642

Filed: April 4, 2001

Examiner: M. Wells

For: 88KDA TUMORIGENIC GROWTH
FACTOR AND ANTAGONISTS

REQUEST TO USE COMPUTER READABLE FORM FROM ANOTHER
APPLICATION

ATTN: Application Processing Division
Assistant Commissioner for Patents
Washington, DC 20231

Dear Sir:

The computer readable form in this divisional application, filed April 4, 2001, is identical with that filed in application numbers 08/991,862 filed on December 16, 1997 which is a continuation-in-part application of U.S. application serial number 08/863,079 filed on May 23, 1997. In accordance with 37 CFR 1.821(e), please use the only computer readable form filed in the applications as the computer readable form for the instant application. It is understood that the Patent and Trademark Office will make the necessary change in application number and filing date for the computer readable form that will be used for the instant application. A paper copy of the Sequence Listing is included in a separately filed preliminary amendment for incorporation into the specification.

Dated: April 4, 2001

Respectfully submitted,

By 

James W. Brady, Jr.

Registration No.: 32,115

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APR 11 2001
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket No: Z9996.488/PQ01-A

In re patent application of

Serrero, Ginette

Serial No. 08/991,862

Filed: December 16, 1997

For: 88 KDA TUMORIGENIC GROWTH FACTOR AND ANTAGONISTS

STATEMENT TO SUPPORT FILING AND SUBMISSION IN
ACCORDANCE WITH 37 C.F.R. §§ 1.821-1.825

Assistant Commissioner for Patents
Washington, D.C. 20231
Box SEQUENCE

Sir:

In connection with a Sequence Listing submitted concurrently herewith, the undersigned hereby states that:

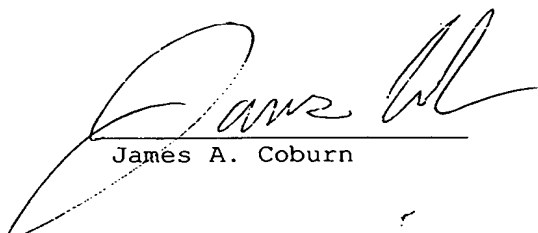
1. the submission, filed herewith in accordance with 37 C.F.R. § 1.821(g), does not include new matter;
2. the content of the attached paper copy and the attached computer readable copy of the Sequence Listing, submitted in accordance with 37 C.F.R. § 1.821(c) and (e), respectively, are the same; and
3. all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United

Serial No. 08/991,

States Code and that such willful false statements may jeopardize the validity of the application or any patent resulting therefrom.

Respectfully submitted,

August 17, 1998
Date


James A. Coburn

HARBOR CONSULTING
Intellectual Property Services
1500A Lafayette Road
Suite 262
Portsmouth, N.H.
800-318-3021

SEQUENCE LISTING

<110> Serrero, Ginette

<120> 88 KDA TUMORIGENIC GROWTH FACTOR AND ANTAGONISTS

<130> Z9996.488/P001-A

<140> 08/991,862

<141> 1997-12-16

<150> 08/863,862

<151> 1997-05-23

<160> 17

<170> PatentIn Ver. 2.0

<210> 1

<211> 2137

<212> DNA

<213> Mouse epithelin/granulin

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<221> CDS

<222> (23)..(1789)

<223> The sequence is identical to that of the published mouse granulin except for one nucleotide (T instead of G) at position 1071 of GP88 cDNA (position 1056 of mouse granulin).

<400> 1

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                        15                      20                      25

cct gtt gcc tgc tgc ctt gac cag gga gga gcc aac tac agc tgc tgt 148
Pro Val Ala Cys Cys Leu Asp Gln Gly Gly Ala Asn Tyr Ser Cys Cys
                        30                      35                      40

aac cct ctt ctg gac aca tgg cct aga ata acg agc cat cat cta gat 196
Asn Pro Leu Leu Asp Thr Trp Pro Arg Ile Thr Ser His His Leu Asp
                        45                      50                      55

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                        60                      65                      70

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Leu Thr Val Ser Gly Thr Ser Ser Cys Cys Pro Phe Ser Lys Gly Val
                        75                      80                      85

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Ser Cys Gly Asp Gly Tyr His Cys Cys Pro Gln Gly Phe His Cys Ser
                        95                      100                      105

```

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Val Gln Cys Pro Gly Ser Gln Phe Glu Cys Pro Asp Ser Ala Thr Cys
125 130 135

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Cys Ile Met Val Asp Gly Ser Trp Gly Cys Cys Pro Met Pro Gln Ala
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tct tgc tgt gaa gac aga gtg cat tgc tgt ccc cat ggg gcc tcc tgt 532
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155 160 165 170

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175 180 185

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Leu Lys Lys Phe Pro Ala Gln Lys Thr Asn Ser Ala Val Ser Leu Pro
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ttt tct gtc gtg tgc cct gat gct aag acc cag tgt ccc gat gat tct 676
Phe Ser Val Val Cys Pro Asp Ala Lys Thr Gln Cys Pro Asp Asp Ser
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acc tgc tgt gag cta ccc act ggg aag tat ggc tgc tgt cca atg ccc 724
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Asn Ala Ile Cys Cys Ser Asp His Leu His Cys Cys Pro Gln Asp Thr
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gta tgt gac ctg atc cag agt aag tgc cta tcc aag aac tac acc acg 820
Val Cys Asp Leu Ile Gln Ser Lys Cys Leu Ser Lys Asn Tyr Thr Thr
255 260 265

gat ctc ctg acc aag ctg cct gga tac cca gtg aag gag gtg aag tgc 868
Asp Leu Leu Thr Lys Leu Pro Gly Tyr Pro Val Lys Glu Val Lys Cys
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gac atg gag gtg agc tgc cct gaa gga tat acc tgc tgc cgc ctc aac 916
Asp Met Glu Val Ser Cys Pro Glu Gly Tyr Thr Cys Cys Arg Leu Asn
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act ggg gcc tgg ggc tgc tgt cca ttt gcc aag gcc gtg 'tgt tgt gac 964
Thr Gly Ala Trp Gly Cys Cys Pro Phe Ala Lys Ala Val Cys Cys Asp
300 305 310

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gga acc tgc gaa atg ggt atc ctc caa gta ggg tgg atg aag aag gtc 1060
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 Pro Cys Asp Asp Phe Thr Arg Cys Pro Thr Asn Asn Thr Cys Cys Lys
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tgc tca gac aac cag cat tgc tgc cct cag ggc ttc aca tgt ctg gct 1252
 Cys Ser Asp Asn Gln His Cys Cys Pro Gln Gly Phe Thr Cys Leu Ala
 395 400 405 410

cag ggg tac tgt cag aag gga gac aca atg gtg gct ggc ctg gag aag 1300
 Gln Gly Tyr Cys Gln Lys Gly Asp Thr Met Val Ala Gly Leu Glu Lys
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gac cgg cag cac tgt tgc ccg gcc ggg tac acc tgc aac gtg aag gcg 1492
 Asp Arg Gln His Cys Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala
 475 480 485 490

agg acc tgt gag aag gat gtc gat ttt atc cag cct ccc gtg ctc ctg 1540
 Arg Thr Cys Glu Lys Asp Val Asp Phe Ile Gln Pro Pro Val Leu Leu
 495 500 505

acc ctc ggc cct aag gtt ggg aat gtg gag tgt gga gaa ggg cat ttc 1588
 Thr Leu Gly Pro Lys Val Gly Asn Val Glu Cys Gly Glu Gly His Phe
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tgc cat gat aac cag acc tgt tgt aaa gac agt gca gga gtc tgg gcc 1636
 Cys His Asp Asn Gln Thr Cys Cys Lys Asp Ser Ala Gly Val Trp Ala
 525 530 535

tgc tgt ccc tac cta aag ggt gtc tgc tgt aga gat gga cgt cac tgt 1684
 Cys Cys Pro Tyr Leu Lys Gly Val Cys Cys Arg Asp Gly Arg His Cys
 540 545 550

tgc ccc ggt ggc ttc cac tgt tca gcc agg gga acc aag tgt ttg cga 1732
 Cys Pro Gly Gly Phe His Cys Ser Ala Arg Gly Thr Lys Cys Leu Arg
 555 560 565 570

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 575 580 585

ccg cta ctg taaggagg ctacagactt aaggaaactcc acagtcctg
Pro Leu Leu

1829

gaaccctggt cagagggtac ccactactca ggccctcccta ggcctcctc ccctaacgtc 1889
tccccggcct actcatcctg agtcacccta tcaccatggg aggtggagcc tcaaactaaa 1949
accttctttt atggaaagaa ggctctggcc aaaagccccg tatcaaactg ccatttcttc 2009
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<211> 589

<212> PRT

<213> Mouse epithelin/granulin

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			20					25					30		
Asp	Gln	Gly	Gly	Ala	Asn	Tyr	Ser	Cys	Cys	Asn	Pro	Leu	Leu	Asp	Thr
		35					40					45			
Trp	Pro	Arg	Ile	Thr	Ser	His	His	Leu	Asp	Gly	Ser	Cys	Gln	Thr	His
	50					55					60				
Gly	His	Cys	Pro	Ala	Gly	Tyr	Ser	Cys	Leu	Leu	Thr	Val	Ser	Gly	Thr
	65				70					75					80
Ser	Ser	Cys	Cys	Pro	Phe	Ser	Lys	Gly	Val	Ser	Cys	Gly	Asp	Gly	Tyr
				85					90					95	
His	Cys	Cys	Pro	Gln	Gly	Phe	His	Cys	Ser	Ala	Asp	Gly	Lys	Ser	Cys
			100					105					110		
Phe	Gln	Met	Ser	Asp	Asn	Pro	Leu	Gly	Ala	Val	Gln	Cys	Pro	Gly	Ser
		115					120					125			
Gln	Phe	Glu	Cys	Pro	Asp	Ser	Ala	Thr	Cys	Cys	Ile	Met	Val	Asp	Gly
		130				135					140				
Ser	Trp	Gly	Cys	Cys	Pro	Met	Pro	Gln	Ala	Ser	Cys	Cys	Glu	Asp	Arg
	145				150				155						160
Val	His	Cys	Cys	Pro	His	Gly	Ala	Ser	Cys	Asp	Leu	Val	His	Thr	Arg
				165				170						175	
Cys	Val	Ser	Pro	Thr	Gly	Thr	His	Thr	Leu	Leu	Lys	Lys	Phe	Pro	Ala
			180					185					190		
Gln	Lys	Thr	Asn	Ser	Ala	Val	Ser	Leu	Pro	Phe	Ser	Val	Val	Cys	Pro
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Thr Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Ile Cys Cys Ser
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Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
245 250 255

Ser Lys Cys Leu Ser Lys Asn Tyr Thr Thr Asp Leu Leu Thr Lys Leu
260 265 270

Pro Gly Tyr Pro Val Lys Glu Val Lys Cys Asp Met Glu Val Ser Cys
275 280 285

Pro Glu Gly Tyr Thr Cys Cys Arg Leu Asn Thr Gly Ala Trp Gly Cys
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Cys Pro Phe Ala Lys Ala Val Cys Cys Asp Asp His Ile His Cys Cys
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Pro Ala Gly Phe Gln Cys His Thr Glu Lys Gly Thr Cys Glu Met Gly
325 330 335

Ile Leu Gln Val Gly Trp Met Lys Lys Val Ile Ala Pro Leu Arg Leu
340 345 350

Pro Asp Pro Gln Ile Leu Lys Ser Asp Thr Pro Cys Asp Asp Phe Thr
355 360 365

Arg Cys Pro Thr Asn Asn Thr Cys Cys Lys Leu Asn Ser Gly Asp Trp
370 375 380

Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp Asn Gln His
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Cys Cys Pro Gln Gly Phe Thr Cys Leu Ala Gln Gly Tyr Cys Gln Lys
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Gly Asp Thr Met Val Ala Gly Leu Glu Lys Ile Pro Ala Arg Gln Thr
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Thr Pro Leu Gln Ile Gly Asp Ile Gly Cys Asp Gln His Thr Ser Cys
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Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Lys Gly Ser Trp Ala Cys
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Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys
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Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Thr Cys Glu Lys Asp
485 490 495

Val Asp Phe Ile Gln Pro Pro Val Leu Leu Thr Leu Gly Pro Lys Val
500 505 510

Gly Asn Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
515 520 525

Cys Cys Lys Asp Ser Ala Gly Val Trp Ala Cys Cys Pro Tyr Leu Lys
 530 535 540

Gly Val Cys Cys Arg Asp Gly Arg His Cys Cys Pro Gly Gly Phe His
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 <211> 19
 <212> PRT
 <213> mouse granulin

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Internal peptide of mouse GP88 used to raise the
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 immunoaffinity step.

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Ser Asp Thr

<210> 4
 <211> 12
 <212> PRT
 <213> mouse granulin

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 <221> PEPTIDE
 <222> (1)..(12)
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<210> 5
 <211> 14
 <212> PRT
 <213> mouse granulin

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 <221> PEPTIDE
 <222> (1)..(14)
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<210> 6

<211> 19

<212> PRT

<213> Human granulin

<220>

<221> PEPTIDE

<222> (1)..(19)

<223> Internal peptide of human GP88 used to develop
neutralizing anti-human GP88 monoclonal antibody.

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Arg Asp Val

<210> 7

<211> 14

<212> PRT

<213> Human granulin

<220>

<221> PEPTIDE

<222> (1)..(14)

<223> Internal peptide of human GP88 used to develop
neutralizing anti-human GP88 monoclonal antibody.

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<212> DNA

<213> mammalian

<220>

<221> primer

<222> (1)..(24)

<223> Internal peptide of CMV promoter used as PCR
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24

<210> 9

<211> 27

<212> DNA

<213> mammalian

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<221> primer
<222> (1)..(27)
<223> GP88 cDNA start codon used as oligonucleotide PCR
primer.

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27

<210> 10
<211> 27
<212> DNA
<213> mammalian

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<223> Antisense primer oligonucleotide primer

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27

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23

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25

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<223> Antisense oligonucleotide to human GP88

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21

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<212> DNA
<213> Human GP88 cDNA

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<222> (13)..(1791)
<223> Nucleotide sequence of human granulin/epithelin
precursor (human GP88). Human Granulin Genebank
M75161.

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Leu Val Ala Gly Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala
15 20 25

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Cys Cys Leu Asp Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu
30 35 40 45

ctg gac aaa tgg ccc aca aca ctg agc agg cat ctg ggt ggc ccc tgc 195
Leu Asp Lys Trp Pro Thr Thr Leu Ser Arg His Leu Gly Gly Pro Cys
50 55 60

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95 100 105	
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160 165 170	
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175 180 185	
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270 275 280 285	
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 Gly Ala Trp Gly Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp
 305 310 315

cac ata cac tgc tgt ccc gcg ggg ttt acg tgt gac acg cag aag ggt 1011
 His Ile His Cys Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly
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acc tgt gaa cag ggg ccc cac cag gtg ccc tgg atg gag aag gcc cca 1059
 Thr Cys Glu Gln Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro
 335 340 345

gct cac ctc agc ctg cca gac cca caa gcc ttg aag aga gat gtc ccc 1107
 Ala His Leu Ser Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro
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tgt gat aat gtc agc agc tgt ccc tcc tcc gat acc tgc tgc caa ctc 1155
 Cys Asp Asn Val Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu
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acg tct ggg gag tgg ggc tgc tgt cca atc cca gag gct gtc tgc tgc 1203
 Thr Ser Gly Glu Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys
 385 390 395

tcg gac cac cag cac tgc tgc ccc cag cga tac acg tgt gta gct gag 1251
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 400 405 410

ggg cag tgt cag cga gga agc gag atc gtg gct gga ctg gag aag atg 1299
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 415 420 425

cct gcc cgc cgc ggt tcc tta tcc cac ccc aga gac atc ggc tgt gac 1347
 Pro Ala Arg Arg Gly Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp
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 Gln His Thr Ser Cys Pro Val Gly Gly Thr Cys Cys Pro Ser Gln Gly
 450 455 460

ggg agc tgg gcc tgc tgc cag ttg ccc cat gct gtg tgc tgc gag gat 1443
 Gly Ser Trp Ala Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp
 465 470 475

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Gly Ser Trp Gly Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp
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Arg Val His Cys Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr
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Pro Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu
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Pro Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys
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Ser Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile
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Gln Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr
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Leu